**AMENDMENTS** 

Applicant requests that the Examiner enter the following amendments:

IN THE CLAIMS:

1. (Currently amended) A method for detecting overexpression of a human RNA species in

blood plasma or serum from a human, the method comprising the steps of:

a) extracting total extracellular RNA from blood plasma or serum from a human;

b) amplifying or signal amplifying quantitatively or qualitatively a portion of the

extracted RNA or cDNA therefrom to produce an amplified product or signal, using

primers or probes specific for a human RNA species or cDNA therefrom; and

c) detecting quantitatively or qualitatively the amplified product or signal and

comparing the detected amplified product or signal to a reference amplified product

or signal of said human RNA species or cDNA extracted from plasma or serum from

a human group or population without disease,

wherein [a] the human RNA species extracted from human blood plasma or serum is determined

to be overexpressed when said RNA species or cDNA therefrom is detected in an amount or

concentration greater than the reference amount or concentration of said RNA species or cDNA

therefrom extracted from said blood plasma or serum from [a] said human group or population

without disease.

2. (Cancelled)

3. (Cancelled)

4. (Currently amended) The method of claim 1, wherein the <u>human RNA species is a tumor-</u>

associated RNA amplified product in step (b) is produced from a tumor related RNA or

cDNA produced therefrom.

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- 5. (Currently amended) A method for detecting overexpression of a human RNA species in a non-cellular fraction of blood from a human, the method comprising the steps of:
  - a) extracting total extracellular RNA from a non-cellular fraction of blood from a human;
  - b) amplifying or signal amplifying quantitatively or qualitatively a portion of the extracted RNA or cDNA therefrom to produce an amplified product or signal, using primers or probes or detectably-labeled primers or detectably-labeled probes specific for a human RNA species or cDNA therefrom; and
  - c) detecting quantitatively or qualitatively the amplified product or signal and comparing the detected amplified product or signal to a reference amplified product or signal of said RNA or cDNA extracted from a non-cellular fraction of blood from a human group or population without a disease,

wherein the human RNA species extracted from a non-cellular fraction of human blood is determined to be overexpressed when said RNA species, or cDNA therefrom, is detected in an amount or concentration greater than the reference amount or concentration of said RNA species or cDNA therefrom extracted from said non-cellular fractions of blood from [a] said human group or population without disease.

- 6. (Cancelled)
- 7. (Cancelled)
- 8. (Currently amended) The method of claim 5, wherein the <u>human RNA species is a tumor-associated RNA amplified product in step (b) is produced from a tumor related RNA or eDNA produced therefrom.</u>

9. (Currently amended) A method for comparing an amount or concentration of a human RNA species present in plasma or serum from a human to a reference range RNA amount or concentration for said RNA species present in plasma or serum from a group or population of humans without cancer, the method comprising the steps of extracting total extracellular RNA from plasma or serum from a human, a portion of which comprises a human RNA species, determining an amount or concentration of said human RNA species in the extracted portion of human blood plasma or serum, and comparing the amount or concentration of said human RNA species from plasma or serum of said human to the reference range RNA amount or concentration determined from said plasma or serum from [a] said human group or population without cancer.

- 10. (Cancelled)
- 11. (Cancelled)
- 12. (Previously presented) The method of claim 9, wherein the human has cancer.
- 13. (Cancelled)
- 14. (Previously presented) The method of claim 9, wherein the human has not been diagnosed with cancer.
- 15. (Cancelled)
- 16. (Cancelled)
- 17. (Previously presented) The method of claim 9, wherein the group or population comprises humans of a specific gender or age group.
- 18. (Previously presented) The method of claim 9, wherein the group or population comprises humans who smoke.
- 19. (Withdrawn)

20. (Currently amended) A method for comparing an amount or concentration of an extracellular human RNA species present in non-cellular fractions of blood from a human to a reference range RNA amount or concentration for said RNA species present in non-cellular fractions of blood from a group or population of humans without cancer, the method comprising the steps of extracting total extracellular RNA from a non-cellular fraction of blood from a human, a portion of which comprises a human RNA species, determining an amount or concentration of said human RNA species in the extracted portion of a non-cellular fraction of blood from the human, and comparing the amount or concentration of said human RNA species from a non-cellular fraction of blood of said human to the reference range RNA amount or concentration for said human RNA species determined from said non-cellular fractions of blood from [a]said human group or population without cancer.

- 21. (Cancelled)
- 22. (Cancelled)
- 23. (Previously presented) The method of claim 20, wherein the human has cancer.
- 24. (Cancelled)
- 25. (Previously presented) The method of claim 20, wherein the human has not been diagnosed with cancer.
- 26. (Cancelled)
- 27. (Cancelled)
- 28. (Previously presented) The method of claim 20, wherein the group or population comprises humans of a specific sex or age group.

29. (Previously presented) The method of claim 20, wherein the group or population comprises humans who smoke.

Claims 30-44. (Cancelled)

- 45. (Previously presented) The method according to claim 9, wherein the human has a cancer and wherein the RNA species is a tumor-associated RNA.
- 46. (Previously presented) The method according to claim 20, wherein the human has a cancer and wherein the RNA species is a tumor-associated RNA.

Claims 47-50 (Cancelled)